

R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

THE TITLE

The title has been amended to more clearly indicate the nature of the invention to which the claims are directed, as required by the Examiner.

ALLOWABLE SUBJECT MATTER

The Examiner's indication of the allowability of the subject matter of claims 9, 18, 27, and 36 is respectfully acknowledged.

These claims, however, have not been rewritten in independent form at this time since, as set forth in detail hereinbelow, it is respectfully submitted that their respective parent claims also recite allowable subject matter.

THE CLAIMS

Claims 19-27 have been amended to recite a computer readable storage medium, so as to recite statutory subject matter under 35 USC 101. Accordingly, it is respectfully requested that the rejection under 35 USC 101 be withdrawn.

In addition, the claims have been amended to make some minor grammatical improvements so as to put them in better form for issuance in a U.S. patent.

No new matter has been added, and it is respectfully requested that the amendments to the claims be approved and entered.

It is respectfully submitted, moreover, that the amendments to the claims do not narrow the scope of the claims, either literally or under the doctrine of equivalents.

THE PRIOR ART REJECTION

Claims 1-7, 10-16, 19-25 and 28-34 were rejected under 35 USC 102 as being anticipated by USP 6,823,090 ("Matsuura"), and claims 8, 17, 26 and 35 were rejected under 35 USC 103 as being obvious in view of the combination of Matsuura and USP 6,741,739 ("Vincent"). These rejections, however, are respectfully traversed with respect to the claims as amended hereinabove.

According to the present invention as recited in independent claim 1, a method for processing image signals is provided which comprises: reading an image recorded on a recording medium so as to generate image signals representing said image; applying, to said image signals, a multi-resolution conversion processing of at least level 1, which is capable of reducing an image size of

said image signals, so as to generate first-converted image signals from said image signals; and applying a Dyadic Wavelet transform of at least level 1 to low frequency band component signals included in said first-converted image signals, so as to generate second-converted image signals from said first-converted image signals; wherein an image size of said first-converted image signals is smaller than the image size of said image signals.

With this technique of the claimed present invention, the multi-resolution conversion processing of at least level 1 (for instance, the bi-orthogonal wavelet conversion) is applied to the image signals read from the original image, so as to generate the first-converted image signals from the read image signals. Successively, the Dyadic Wavelet transform (not Discrete Wavelet transform) of at least level 1 is applied to the low frequency band component signals extracted from the first-converted image signals.

In addition, image processing, for example, may be applied only to the high frequency band component signals acquired by applying the multi-resolution conversion processing and the Dyadic Wavelet transform. See, for example, dependent claim 3.

With the technique recited in claim 1, it becomes possible to reduce the processing load without causing a deterioration of the image quality. In addition, the features and advantageous

effects described in the specification from page 71, line 7 to page 72, line 13 can be achieved. For further detail, the Examiner is respectfully referred to the disclosure in the specification relating to, for example, "Embodiment 1" at page 65, line 18 to page 72, line 13.

It is respectfully submitted that the features and advantageous effects of the present invention recited in independent claim 1 (and in independent claims 10, 19 and 28) are not at all disclosed, taught or suggested in the cited references, even if considered in combination.

In particular, Matsuura discloses an image processing method including: dividing an original image area (X-ray image) into plural rectangular areas; executing a texture analysis processing for every rectangular area; and applying the discrete wavelet transform to each of the divided rectangular areas based on the result of the texture analysis processing.

The Examiner asserts that the image processing method disclosed by Matsuura is equivalent to the method recited in independent claim 1. It is respectfully submitted, however, that Matsuura does not at all suggest "applying a Dyadic Wavelet transform of at least level 1 to low frequency band component signals included in said first-converted image signals, so as to generate second-converted image signals from said first-converted image signals" as according to the present invention as recited

in independent claim 1. It is respectfully submitted that Matsuura, by contrast, merely discloses a conventional method for applying the Discrete Wavelet transform to each of the rectangularly segmented areas divided from the original X-ray image. And it is respectfully submitted that the disclosure of the Discrete Wavelet transform by Matsuura does not correspond to the Dyadic Wavelet transform recited in claim 1.

It is respectfully submitted, moreover, that even if it were assumed that the Dyadic Wavelet transform of claim 1 were equivalent to Discrete Wavelet transform, Matsuura still would not disclose applying a Dyadic Wavelet transform of at least level 1 to low frequency band component signals included in the first-converted image signals, as recited in claim 1. That is, it is respectfully submitted that the rectangularly segmented areas disclosed by Matsuura cannot be considered to be equivalent to the low frequency band component signals recited in the claim 1.

Accordingly, it is respectfully submitted that the image processing method disclosed by Matsuura is merely one of the conventional methods that do not achieve or suggest the features and advantageous effects of the present invention as recited in independent claim 1.

Accordingly, it is respectfully submitted that independent claim 1 clearly patentably distinguishes over Matsuura. And it

is respectfully submitted that independent claims 10, 19 and 28 also clearly patentably distinguish over Matsuura for the same reasons.

Vincent, moreover, has merely been cited with respect to dependent claims 8, 17, 26 and 35.

In view of the foregoing, it is respectfully submitted that independent claims 1, 10, 19 and 28, and claims 2-9, 11-18, 20-27 and 29-36 respectively depending therefrom, all clearly patentably distinguish over Matsuura and Vincent, taken singly or in combination, under 35 USC 102 as well as under 35 USC 103.

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Entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned for prompt action.

Respectfully submitted,

/Douglas Holtz/

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